Proposed Plan

Site 41 – Military Sealift Command Van Parking Lot
Naval Weapons Station Earle, Colts Neck, New Jersey

The Proposed Plan

This **Proposed Plan** has been prepared, in accordance with federal law, to present the Navy's preferred approach for addressing soil at Site 41 - Military Sealift Command (MSC) Van Parking Lot, which is located in the Mainside Area at Naval Weapons Station (NWS) Earle, Colts Neck, New Jersey. This **Proposed Plan** is intended to support the development of a final **Record of Decision (ROD)** for Site 41.

Soils are the only medium of concern associated with a potential **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended (CERCLA) (**known also as **Superfund)** release at the site. After thorough evaluation of site conditions and potential human health and ecological risks, the Navy and the United States Environmental Protection Agency (EPA) (lead regulatory agency) are proposing **No Action** as the preferred remedy for this site. The New Jersey Department of Environmental Protection (NJDEP) (support regulatory agency) is still evaluating the Navy's preferred alternative presented in this **Proposed Plan**. This remedy is preferred because no unacceptable risks to human or ecological **receptors** have been identified. This **Proposed Plan** contains information about Site 41 including site characteristics and existing levels of contamination. No unacceptable risk is documented as the basis for a **No Action** decision that will ensure protection of human health and the environment, and provide the process for the selection of the final remedy.

This **Proposed Plan** is issued by the Department of the Navy (the lead agency for Environmental Restoration Program and **Superfund** activities at NWS Earle) and the EPA. The Navy and EPA, in consultation with the NJDEP (a support agency for **Superfund** activities at NWS Earle), will make a final decision on the remedial approach for Site 41 after reviewing and considering all information submitted during the 30-day **Public Comment Period.** The Navy and EPA may modify the preferred remedy based on new information or public comments. Therefore, the public is encouraged to review and comment on the **Proposed Plan**.

The Navy is issuing this **Proposed Plan** as part of its public participation responsibilities under Sections 113(k), 117(a), and 121(f) of **CERCLA**, as amended, 42 United States Code §§9613(k), 9617 (a), and 9621(f) and 40 Code of Federal Regulations §300.430(f)(2) and (3) of the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP).**

LET US KNOW WHAT YOU THINK

Mark Your Calendar!

Public Comment Period
July 20 to August 20, 2020

The Navy will accept comments on this Proposed Plan during this period. To provide formal comments, you may offer oral comments during the virtual public meeting (see below), provide written comments during the virtual public meeting, or by mail. Send written comments postmarked no later than August 20, 2020 to:

Naval Weapons Station Earle
Attn: Public Affairs Office
201 Route 34
Building C-2
Colts Neck, NJ 07722

Virtual Public Meeting
August 5, 2020, 5:30 to 7:30 PM

The Navy invites you to attend a virtual public meeting to learn more about the proposed plan for Site 41. During the meeting, the Navy will present the Proposed Plan and receive formal comments on the plan from the public. An official transcript of the virtual public meeting and any comments will be recorded and made available to the public.

The virtual public meeting will utilize a webinar tool known as WebEx. If you do not have WebEx on your computer or mobile device, please allow sufficient time before the meeting to download the application. A telephone number is provided below for your convenience if you are not able to log into WebEx. The webinar information is as follows:

https://tinyurl.com/EarleSite41

Phone access: 1-408-418-9388 (toll free)

Access code: 132 725 1083

Additional details of the virtual meeting are also posted to this website:

https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/midlant/earle/outreach.html

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INTRODUCTION

In 1990, NWS Earle was placed on the **National Priorities List (NPL)**, which is a list of sites where uncontrolled hazardous substance releases may potentially present serious threats to human health and the environment. Federal and state environmental laws govern cleanup activities at federal facilities. A federal law called **CERCLA**, also known as **Superfund**, provides (among other things) procedures for investigation and cleanup of environmental problems. Under this law, the Navy is pursuing cleanup of designated sites at NWS Earle to return the property to a condition that protects the community, workers, and the environment.

This Proposed Plan contains information on the preferred approach for addressing soil contamination at Site 41 - MSC Van Parking Lot, and provides the rationale for selection of the proposed remedy. This document is issued by the Navy (the lead agency for the Environmental Restoration Program and other ongoing **CERCLA** activities at NWS Earle) and EPA. The NJDEP (support regulatory agency) is still evaluating the Navy's preferred alternative presented in this **Proposed Plan**. The Navy and EPA (lead regulatory agency), in consultation with NJDEP (support regulatory agency), will select the final remedy for Site 41 after reviewing and considering comments submitted during the 30-day **public comment period**. The proposed remedy may be modified based on new information received during the comment period; therefore, the public is encouraged to review and comment on the remedy presented in this Proposed Plan.

This Proposed Plan summarizes information that can be found in greater detail in the **Remedial Investigation (RI)** and draft **Feasibility Study** (**FS)** and Technical Memorandum for Site 41 and in other documents provided in the NWS Earle **Information Repository** located at the Monmouth County Library Eastern Branch, Route 35, Shrewsbury, New Jersey. The Navy and EPA encourage the public to review these documents to gain a more comprehensive understanding of the site and associated environmental activities. Please refer to the Additional Information section on Page 9 for location and contact information for individuals involved with the decision-making process for this site.

The purposes of this Proposed Plan are to:

- Provide basic background information about Site 41.
- Summarize the findings of the **RI** and draft **FS** and updated **risk assessments**.
- Identify the Navy's preferred remedy and explain the reasons for that preference.
- Provide information about how the public can be involved in the remedy selection process.
- Solicit and encourage public review of this Proposed Plan.

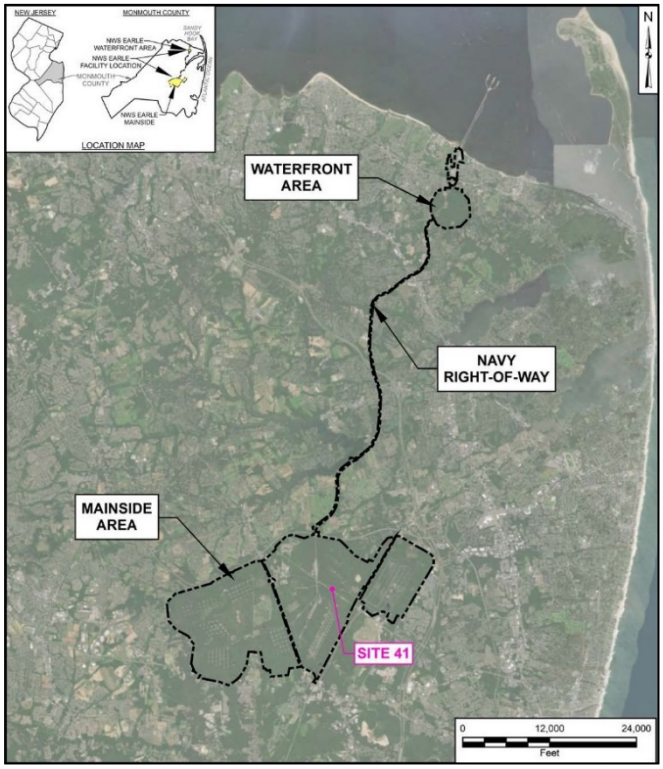
After the public has had the opportunity to review and comment on this Proposed Plan, the Navy will prepare a **Responsiveness Summary** which will be issued with the Record of Decision (ROD) that summarizes and responds to all significant comments received during the comment period. The Navy and EPA, in consultation with NJDEP, will carefully consider all comments received and will document the final remedy in a **ROD** for the site.

SITE BACKGROUND

NWS Earle is located in Monmouth County, New Jersey, approximately 47 miles south of New York City (Figure 1). The base consists of two areas: the 10,248-acre Main Base (Mainside area), located approximately 10 miles inland from the Atlantic Ocean at Sandy Hook Bay; and the 706-acre Waterfront area. The two areas are connected by a Navy-controlled right-of-way. The Mainside area is located in Colts Neck, Howell, and Wall Townships; and Tinton Falls Borough. The combined population of these municipalities is approximately 105,000 people.

The surrounding area includes agricultural land, vacant land, and low-density housing. Land use within the Mainside Area consists of offices, workshops, warehouses, residences, recreational space, open space, and undeveloped land. A large undeveloped portion of the Mainside Area is associated with ordnance operations, including storage.

Figure 1. NWS Earle Facility Location Map



The facility was commissioned in 1943, and its primary mission has been to supply ammunition to the Atlantic Fleet. The current mission of NWS Earle is to operate and maintain a coastal ordnance handling and processing facility supporting the Atlantic Fleet, United States Coast Guard, and Department of Defense (DoD) requirements; while providing force protection, logistics support, and host services for facility personnel and home ported and visiting ships. An estimated 1,000 people work or live at NWS Earle.

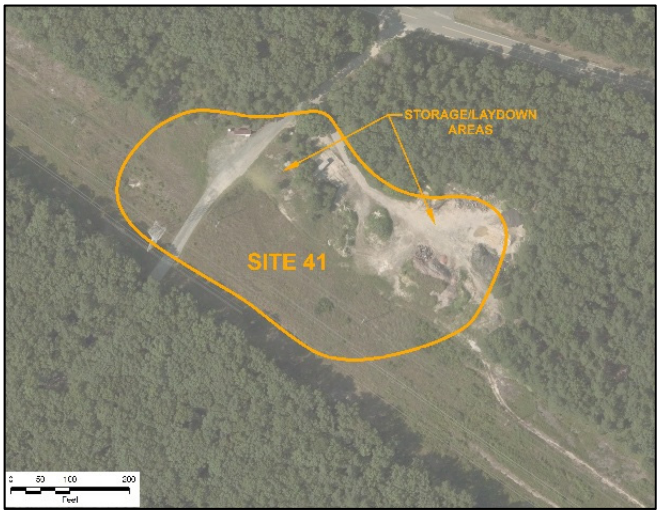
Where is Site 41 located, how big is it, and how was it used?

Site 41 is approximately 15.7 acres and is located near Asbury Avenue within the Mainside Area of NWS Earle (see Figures 1 and 2). Approximately 4 acres of the site are used for the temporary storage or staging of materials from the NWS Earle Public Works Department, including: utility poles; railroad ballast stone; miscellaneous metal, plastic, and wood scrap material; and small asphalt and concrete piles. A high-voltage power line and easement are located on the remaining 11 acres. Materials have been stored at the site since at least 1953, and past storage practices are not well documented. No waste disposal has been documented at Site 41. Site 41 is not within the area where Mainside Administration buildings are located.

Figure 2. Site 41 Location Map

The site is dirt-covered and level, with little grade change. Within the utility easement, the site is covered with grasses and short- to medium-sized bushes (see Figure 3).

Figure 3. Aerial Photograph of Site 41



What is the current land use at Site 41?

This site has been used as a general storage area since at least 1953. The land use is not anticipated to change in the future. Site 41 continues to be an active NWS Earle Public Works Department work area and is currently used to temporarily store utility poles; railroad ballast stone; miscellaneous metal, plastic, and

wood scrap material; and small asphalt and concrete piles.

SITE CHARACTERISTICS

Where and What Types of Contamination are Present?

In December 1995, seven surface soil samples were collected as part of a base-wide **RI** that was completed in 1996. These samples were collected near the site storage piles to evaluate whether storage of asphalt and telephone poles had impacted soils; and if so, to determine if contaminants had migrated from the storage areas.

The samples were analyzed for **metals**, and these organic compound groups: **volatile organic compounds (VOCs)**, **semivolatile organic compounds (SVOCs)**, **pesticides**, **polychlorinated biphenyls (PCBs),** and **total petroleum hydrocarbons (TPH)**.

Soil results were screened against residential **Regional Screening Levels (RSLs)** developed by the EPA to identify **Chemicals of Potential Concern (COPCs).** The screening involved comparing the maximum concentration of each chemical in soil to the respective residential **RSL**. Residential **RSLs** are chemical concentrations that are considered to be protective of the health of future residents, a scenario which is the most conservative potential exposure scenario. Under this hypothetical scenario, the RSL for chemicals with non-cancer health effects is the concentration that a young child resident (6 years and younger) could be safely exposed to in soils for 350 days per year for a period of 6 years; and for an adult resident to be exposed to for 350 days per year for a period of 26 years. Under this hypothetical scenario for chemicals with cancer health effects, the RSL is the concentration that would be protective to residents with a lifetime exposure period of 70 years. Chemical concentrations in soil were also compared to **EPA ecological soil screening levels (Eco-SSLs)**. The Eco-SSLs were developed by the EPA to be protective of ecological **receptors** that commonly come into contact with soil or ingest biota that live in or on soil.

Those chemicals with concentrations greater than the applicable residential **RSL** and **Eco-SSL** were identified as **COPCs**.

A discussion of the chemicals with concentrations greater than the residential and industrial **RSLs** is provided below. No **VOCs**, **pesticides**, or **PCBs** were detected above **RSLs** or **Eco-SSLs**.

The COPCs identified during the screening process were then incorporated into the baseline **human health risk assessment (HHRA)** and **ecological risk assessment (ERA)** to determine if the risks exceeded the risk range established under the National Oil and Hazardous Substances Pollution Contingency Plan (described below). The baseline **risk assessments** evaluated **carcinogenic** and **non-carcinogenic** human health effects and ecological effects in the absence of remedial action and/or land use controls. The Summary of Risks section below presents potential risks to human health and ecological receptors.

Metals

Results for **metals** were compared to **background** concentrations to determine whether concentrations detected in the samples were elevated as a result of site activities.

Surface soil samples collected during the **RI** were from material laydown areas and from potential surface water drainage pathways. Results showed that most **metals** concentrations in samples from the site did not exceed the concentrations in **background** samples collected from uncontaminated areas.

Cadmium, copper, and magnesium were the only inorganics (metals) found in Site 41 samples at concentrations exceeding the concentrations in **background** soil samples collected at uncontaminated areas at NWS Earle. The **background** soil concentrations used for comparison were approved by EPA and NJDEP. Cadmium and magnesium exceeded **background** concentrations in one sample. Copper exceeded **background** in two samples. The detected concentrations of these **metals**, however, were less than the respective residential **RSLs**. The **RSLs** are designed to be conservative; therefore, concentrations below these levels are do not pose any unacceptable risk.

Arsenic, chromium, and iron were detected at concentrations greater than the residential **RSLs**, but less than their respective **background** concentrations. The EPA-approved and NJDEP-concurred **RI** report

concluded that there was no site-related **metals** contamination in the site soils, and recommended that no remedial action for **metals** was necessary to ensure protection of human health and the environment.

Organic Compounds

The seven surface soil samples contained low levels of five **polynuclear aromatic hydrocarbons (PAHs)** typically encountered in treated lumber and/or asphalt pavement. **PAHs** are a subgroup of **SVOCs**. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were found in surface soil samples at levels exceeding their respective residential **RSLs**. Benzo(a)pyrene was detected in one sample (700 micrograms per kilogram [ug/kg]) at a concentration greater than the industrial (current site use) **RSL**. No other organic contaminants were detected in excess of industrial **RSLs** in any Site 41 sample. The samples with **PAH** concentrations greater than residential **RSLs** were collected from areas used for storing telephone poles and piles of asphalt, and from potential surface water drainage pathways from the storage areas. No other organic compounds were detected at concentrations exceeding residential **RSLs** in Site 41 soils.

The data were evaluated to determine compliance with the NJDEP **Residential Direct Contact Soil Remediation Standards (RDCSRSs)**, which are the **unlimited use and unrestricted exposure (UU/UE)** standards for the Site. The data were also compared to the NJDEP' **Impact to Groundwater Screening Levels (IGWSLs)**. One constituent, benzo(a)pyrene, was identified above the **RDCSRS** and **IGWSL**. The data were evaluated using NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria. The evaluation concluded that benzo(a)pyrene is compliant with **UU/UE** and **IGWSLs**.

Scope and Role of the Response Action

Site 41 is one of several sites being addressed at NWS Earle under **CERCLA**. Each of the sites progresses through the **CERCLA** process independently of each other. The Proposed Plan for this site is not expected to have an impact on the strategy or progress of cleanup at any of the other NWS Earle sites. **No Action** has been approved for ten **CERCLA** sites at NWS Earle; and 14 sites (including Site 41) are currently active in the **CERCLA** process. **RODs** have been approved for the other sites and remedies have been implemented in accordance with the **RODs**. In addition, three other sites are being investigated for emerging contaminants. After the public has commented on this Proposed Plan and all comments have been considered, the Navy will prepare a **ROD** for Site 41.

Summary of Risks

The Navy completed the 2019 **HHRA** update to evaluate current and future effects of the chemicals detected in Site 41 soil on human health. A screening-level 2019 **ERA** update was also conducted by the Navy. The update was conducted because of how long it had been since the initial assessment, and there were changes made to toxicological criteria during that time. The **risk assessment** methodology and results are discussed below.

Summary of HHRA

The 2019 HHRA update for Site 41 was performed in accordance with **Superfund** guidance to evaluate the baseline risk, which is the potential for adverse health effects occurring under the assumptions used in the exposure assessment if no cleanup actions were taken at the site. To estimate the baseline risk for humans, a four-step process was used. Further evaluation of the **PAHs**, as discussed below, indicated that the risk posed by **PAHs** is within EPA's acceptable risk range for **carcinogens** and below the **HI** goal of 1.0 for **non-carcinogens**; therefore, a remedial action is not necessary to ensure protection of human health and the environment.

Step 1 – Identify Chemicals of Potential Concern (COPCs)

COPCs are chemicals found at the site at concentrations greater than federal and state risk-based screening levels. Chemicals or substances with concentrations greater than these levels were further evaluated in the HHRA. The maximum detected concentrations of arsenic, chromium, iron, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene exceeded their respective risk based screening levels, and these chemicals were selected as **COPCs** at Site 41.

History of Site Environmental Investigations

1992 – Preliminary Assessment Addendum

In 1992, a follow-up investigation to the Initial Assessment Study of 1982/1983 of the NWS Earle facility was conducted. Additional interviews and aerial photograph analysis were also performed. The photograph analysis revealed a stained area near a treated utility pole storage area and a hardened pile of asphalt, and the area was designated as Site 41. No further work was recommended in the Addendum to the Preliminary Assessment.

1996 – Remedial Investigation

In December 1995, as part of the base-wide **RI** completed in 1996, seven surface soil samples (from 0 to 0.5 feet in depth below the ground surface) were collected from Site 41. The objective of follow-up **RI** activities was to determine if storage of utility poles, asphalt and other materials impacted soil. No waste disposal has occurred at Site 41. The risk assessments conducted as part of the RI determined that no human health or ecological risks were present based on concentrations of contaminants detected.

2011 to 2016 – Feasibility Study (FS)

In February 2016, in order to obtain site closure, the Navy completed a draft **FS**, which evaluated potential cleanup alternatives. Based on the EPA and NJDEP comments on the draft **FS**, the Navy prepared a Technical Memorandum to update **RI Risk assessment** using current toxicological criteria.

2019 – Technical Memorandum

In March 2019, the Navy completed the Technical Memorandum for the updated **risk assessment**. No unacceptable risk or hazards were identified. In addition, all constituents are compliant with the NJDEP **UU/UE** requirements, as well as NJDEP **IGWSL**. The Technical Memorandum concluded that Site 41 should proceed to **No Action Proposed Plan** and **ROD**.

What Is Risk and How Is It Calculated?

Expressing Estimated Human Health Risks

Human Health Risk Assessment: When evaluating the risk to humans, the risk estimates for **carcinogens** (chemicals that may cause cancer) and **non-carcinogens** (chemicals that may cause adverse effects other than cancer) are expressed differently.

Carcinogens: For cancer-causing chemicals, risk estimates are expressed in terms of probability. For example, exposure to a particular **carcinogenic** chemical may present a 1 in 10,000 chance of causing cancer over an estimated lifetime of 70 years. This can also be expressed as $1x10^{-4}$. The acceptable risk range stated in the **NCP** for **carcinogens** is $1x10^{-4}$ to $1x10^{-6}$ or a 1 in 10,000 to 1 in 1 million increased risk of developing cancer based on exposure assumptions used in the baseline risk assessment. In general, calculated risks greater than this range would require consideration of the development and implementation of cleanup alternatives.

Non-Carcinogens: For non-cancer-causing chemicals, exposures are first estimated and then compared to a **reference dose (RfD).** The reference dose is developed by EPA scientists to estimate the amount of a chemical a person (including the most sensitive person) could be exposed to over a lifetime without developing adverse (non-cancer) health effects. The comparison of a RfD is for a single chemical result in a HQ. This measure of exposures to multiple chemicals is known as a **hazard index (HI)**. A **HI** greater than 1 suggests that adverse effects are possible.

Step 2 – Conduct an Exposure Assessment

In this step, the ways that humans come into contact with soil at the site were considered. Both current and reasonably foreseeable future exposure scenarios were identified.

Human **receptors** evaluated at Site 41 included current and future industrial workers and hypothetical future residents. The ways in which these **receptors** were assumed to come into contact with the **COPCs** included incidental ingestion, skin contact, and inhalation of airborne particles from soil.

The HHRA update considered the trespasser scenario and a more conservative residential exposure scenario.

Step 3 – Complete a Toxicity Assessment

At this step, possible harmful effects from exposure to the individual **COPCs** were evaluated. Generally, these chemicals were separated into two groups: carcinogens (chemicals that may cause cancer), and non-carcinogens (chemicals that may cause adverse effects other than cancer). Chemicals were evaluated based on **cancer risks**, non-cancer hazards or both depending on the toxicity information available for the individual chemicals. See the text box on page 6 for further details.

Step 4 – Characterize the Risk

The results of Steps 2 and 3 were combined to estimate the overall risk from exposure to the **COPCs** at Site 41. Evaluation of **background** occurred during this stage of the **risk assessment** where **COPCs** attributable to **background** may be removed from consideration.

The terms used to define the estimated risk are explained in the text box above.

The results of the **risk assessment** for **receptors** at Site 41 indicated the following:

The **cancer risks** to the future resident were 7.9×10^{-5} or 7.9 in 100,000 which is within the acceptable risk range. The non-cancer **HI** was less than 1: a calculated **HI** of 0.35 for the young child and an HI of 0.03 for the adult. The **cancer risks** to the adult worker is 4.8×10^{-6} or 4.8 in 1,000,000; and the non-cancer **HI** is 0.02 which is below the goal of protection of an **HI** of 1 (for multiple chemicals) or a **HQ** of 0.1 (for a single chemical).

Based on current HHRA methods, toxicological information, and updated exposure factors, the 2019 HHRA update for Site 41 indicated that unacceptable human health risks are not expected to occur as a result of exposure to any chemicals for hypothetical future child, adult, or lifetime residents; trespassers; or industrial workers exposed to soil at the site.

Summary of Ecological Risk Assessment

The purpose of the Site 41 **ERA** update was to determine whether adverse ecological impacts are potentially occurring from exposure to chemicals released to the environment as a result of historical operations at the site. The **ERA** update was conducted by performing risk screening-level assessments as Tier 1 of the three-tiered approach in accordance with EPA and Navy guidance.

Based on the habitat present at Site 41, potential ecological **receptors** include a variety of terrestrial plants, invertebrates, mammals, and birds that may be exposed to chemicals in site soil. Based on the conservative screening-level risk evaluation, **PAHs**, pesticides, and **metals** were initially selected as **COPCs** in soil. Reasons for **COPC** selection included detection at concentrations exceeding NJDEP ecological screening criteria, lack of screening criteria, or indications of risk based on conservative food web models. These chemicals were then further evaluated to refine the list of **COPCs** and to better characterize risks to ecological **receptors**. This evaluation was conducted by dividing the maximum detected concentration by a no adverse ecological effects screening level. If the ratio was greater than 1.0, that chemical was considered a **COPC**. **COPCs** were further refined based on an evaluation of additional benchmarks, less conservative food chain modeling and comparison to background concentrations. This refinement identified **chemicals of concern (COCs)** which may present an unacceptable risk.

Based on the refined **risk assessment**, no chemicals were retained as **COCs** in soil for risks to terrestrial plants, invertebrates, mammals, or birds. Based on the 2019 **ERA** update, no site-related contaminants posed potential ecological concern; therefore, there are no unacceptable risks to ecological **receptors** that need to be addressed at Site 41.

Summary of Proposed Plan

Soil is the only media potentially impacted from historical use of the site for storage activities. As no unacceptable human health or ecological risks are present, the Navy proposes **No Action**. Following the public comment period, the Navy expects to submit to the EPA and NJDEP a **No Action ROD**.

Community Participation

The public is encouraged to participate in the decision-making process for Site 41 by reviewing and commenting on this Proposed Plan during the **public comment period**, which is July 20 to August 20, 2020.

In addition, the Navy will hold a virtual public meeting during the comment period. At the virtual public meeting, the Navy, with input from EPA, will present the Proposed Plan and accept oral and written comments and questions about the plan. The virtual public meeting is scheduled for August 5, 2020, 5:30 to 7:30 PM.

What is a Formal Comment?

Federal regulations make a distinction between "formal" comments received during the 30-day comment period and "informal" comments received outside this comment period. Although the Navy considers comments received throughout the **CERCLA** process in making site-specific decisions, formal comments submitted during the comment period require a response from the Navy. Both your comments and the Navy's responses will become part of the **Responsiveness Summary** in the **ROD** for the site.

How can I submit a Formal Comment?

Formal comments can be submitted in writing or made orally. To make a formal comment on the Proposed Plan, you may:

- Offer oral comments during the virtual public meeting.
- Provide written comments at the virtual public meeting, email, or by mail.

To send written comments, contact:

Naval Weapons Station Earle
Attn: Public Affairs Office
201 Route 34
Building C-2
Colts Neck, NJ 07722

A tear-off mailer is provided at the end of this Proposed Plan. All comments must be postmarked no later than August 20, 2020.

Next Steps

The Navy will accept public comments during a 30-day formal comment period. The Navy will consider and use these comments to improve its cleanup approach.

During the formal comment period, the Navy will accept written comments at the virtual public meeting, email, or by mail. Additionally, verbal comments may be made during the virtual public meeting on August 5, 2020, 5:30 to 7:30 PM, during which a stenographer will record all offered comments. The Navy will not respond to comments during the virtual public meeting, but representatives from the Navy, EPA, and NJDEP will be available to answer questions during the informational open house to be held prior to the start of the virtual public meeting on August 5, 2020.

The Navy will review the transcript of all the comments received during the meeting and all written comments received during the comment period before making a final remedy decision. The Navy will then prepare a written response to all the formal written and oral comments received. All formal comments will become part of the official public record. The transcript of comments and the Navy's written responses will be issued in a document called a **Responsiveness Summary** when the Navy releases the **ROD**. The **Responsiveness Summary** and **ROD** will be made available to the public at the Monmouth County Library Eastern Branch (see address below).

The Navy will announce the final decision on the proposed remedy through the local media and **Administrative Record**.

Additional Information

The Proposed Plan was prepared to help the public understand and comment on the proposed **CERCLA** remedy for Site 41 – MSC Van Parking Lot. For additional information, contact:

Paul Young, Remedial Project Manager
NAVFAC Mid-Atlantic
EV35 Environmental Restoration North
9324 Virginia Avenue, Building N26
Norfolk, VA 23511
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Doug Pocze, Remedial Project Manager
Environmental Protection Agency, Region II
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Erica Bergman, Project Manager
New Jersey Department of Environmental Protection
401 E. State Street - Mail Code 401-05F
P.O. Box 420
Trenton, NJ 08625-0420
Phone: (609) 292-7406
Email: erica.bergman@dep.nj.gov

Or visit the Information Repository at:
Monmouth County Library Eastern Branch
Route 35
Shrewsbury, NJ 07702

Administrative Record via website:
The **administrative record** can be found online at the following website: http://go.usa.gov/kYQW
Click on the link for "Administrative Records", then "Administrative Record File".

GLOSSARY OF TERMS

This glossary defines the bolded terms used in this Proposed Plan. The definitions in this glossary apply specifically to this Proposed Plan and may have other meanings when used in different circumstances.

Administrative Record: An official compilation of site-related documents, data and other information that was considered or relied upon in making a clean-up decision at a **CERCLA** site. Information in the Administrative Record supports the selected remedy for the remedial actions and removal actions. The public has access to this material. The administrative record only contains documents, data, and other information which meets DoD public release clearance criteria.

Background: Concentrations of chemicals that would be found in the environment even if there had been no man-made sources or releases of chemicals at the site.

Cancer Risk: Incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen.

Carcinogen: A substance capable of causing cancer.

Chemicals of Concern (COCs): Chemicals of concern are chemicals found at the site that have been refined from the **COPCs** using additional data evaluation, modeling, or comparison to background.

Chemicals of Potential Concern (COPCs): Chemicals of potential concern are chemicals found at the site at concentrations above federal and state risk-screening levels and therefore are included in the **risk assessment** evaluations.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and amended in 1986 by the **Superfund Amendments and Reauthorization Act (SARA)**. These laws create a system and funding mechanism for investigating and cleaning up abandoned and/or uncontrolled hazardous waste sites. The Navy's cleanup of sites regulated by **CERCLA**/**SARA** is funded by the Department of Defense under the Defense Environmental Restoration Fund.

Ecological risk assessment (ERA): A study that evaluates the potential risk to ecological **receptors** (various types of plants and animals) from exposure to contaminants at a site.

EPA ecological soil screening level (Eco-SSL): EPA's **Superfund** program issued soil screening levels for seventeen inorganic and four organic contaminants that are frequently found in soil at **Superfund** sites. The screening levels were developed by the EPA to be protective of ecological receptors that commonly come into contact with soil or ingest biota that live in or on soil.

Feasibility Study (FS): An engineering study of the potential cleanup alternatives for a site.

Hazard Index (HI): The sum of **HQs** for substances that affect the same target organ or organ system. A **HI** of 1 or lower means substances are unlikely to cause adverse noncancer health effects over a lifetime of exposure.

Hazard Quotient (HQ): The ratio of the potential exposure to a substance and the level at which no adverse effects are expected (calculated as the exposure divided by the appropriate chronic or acute value). A **HQ** of 0.1 or lower means adverse noncancer effects are unlikely, and thus can be considered to have negligible hazard.

Human Health Risk Assessment (HHRA): An evaluation of the current and future potential for adverse human health effects from exposure to site contaminants. The evaluation is typically conducted as a four-step process including identifying **COPCs**, conducting an exposure assessment, completing a toxicity assessment, and characterizing the risk.

Impact to Groundwater Screening Level (IGWSL): A **vadose zone** soil remediation standard designed to limit the amount of contaminant that leaches from the vadose zone to ground water such that the resulting ground water concentration will not exceed the applicable ground water remediation standard.

Information Repository: Collection of site information related to the response action at the site that is available to the public. This file is usually maintained in a place with easy public access such as a library. Additional information is available in the glossary definition for **Administrative Record**.

Metals: Metals are naturally occurring elements. Some metals such as arsenic and mercury can have toxic effects. Other metals such as iron are essential to the metabolism of humans. Metals are classified as inorganic because they are of mineral and not biological origin.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): More commonly called the National Contingency Plan, it is the federal government's blueprint for responding to both oil spills and hazardous substance releases. Following the passage of **Superfund** (**CERCLA**) legislation in 1980, the **NCP** was broadened to cover releases at hazardous waste sites requiring emergency removal actions. A key provision involves authorizing the lead agency to initiate appropriate removal action in the event of a hazardous substance release.

National Priorities List (NPL): The list, compiled by EPA pursuant to **CERCLA** Section 105, of uncontrolled or abandoned hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response. EPA is required to update the **NPL** at least once a year. A site must be on the **NPL** to receive money from the Trust Fund for remedial action.

No Action: A Record of Decision that states that a "no action alternative," meaning no change from the present course of action, or a decision to not implement a proposed action, has been selected by the appropriate agency official.

Non-carcinogen: A substance that may cause adverse health effects other than cancer.

Pesticide: A substance used for destroying insects or other organisms harmful to cultivated plants or to animals.

Polychlorinated biphenyls (PCBs): Chemicals commonly used in electrical transformers and other electrical components because they conduct heat well, are heat resistant, and are good electrical insulators. The sale and reuse of **PCBs** were banned in 1979.

Polynuclear aromatic hydrocarbons (PAHs): A group of over 100 chemicals, a subgroup of **semivolatile organic compounds**, that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. **PAHs** are usually found as a mixture containing two or more of these compounds. **PAHs** are found in coal tar, crude oil, creosote, and roofing tar; and a few are used in medicines or to make dyes, plastics, and pesticides.

Proposed Plan: The proposed plan highlights key aspects of the **RI/FS**, provides a brief analysis of remedial alternatives under consideration, identified the preferred alternative, and provides member of the public with information on how they can participate in the remedy selection process.

Public Comment Period: A time for the public to review and comment on various documents and actions taken by the Navy, EPA, or NJDEP. A minimum 30-day comment period is held to allow community members to review the **Administrative Record,** and review and comment on the Proposed Plan.

Receptor: An individual, either a human, plant, or animal, that may be exposed to chemicals present at the site.

Record of Decision (ROD): An official public document that explains which cleanup alternative(s) will be used at **NPL** sites. The **ROD** is based on information and technical analysis generated during the **RI/FS** and consideration of public comments and community concerns. The **ROD** is a legal document that explains the remedy selection process and is issued by the Navy following the **public comment period**.

Reference Dose (RfD): An estimate (with uncertainty spanning perhaps an order of magnitude) of either daily or chronic oral exposure for an acute duration to the human population (including sensitive subgroups) that

is likely to be without an appreciable risk of deleterious effects during a lifetime. Generally used in EPA's noncancer health assessments.

Regional Screening Level (RSLs): Chemical-specific concentrations that are used in the screening process through which contaminants of potential concern are identified for further evaluation in the baseline **HHRA**. RSLs are set at a **cancer risk** of 1 in 10^{-6} (or one in one million) or a non-cancer **HI** of 0.1 to allow for exposure to multiple chemicals.

Remedial Investigation (RI): A step in the **CERCLA** process that is completed to gather sufficient information to support selection of a cleanup approach to a site. The **RI** involves site characterization or the collection of data and information necessary to characterize the nature and extent of contamination at a site. The **RI** also determines whether or not the contamination presents a significant risk to human health or the environment.

Residential Direct Contact Soil Remediation Standard (RDCSRS): A soil remediation standard for the ingestion, dermal, and inhalation exposure pathways established or developed to be protective of human health at residential use sites, schools (pre-K-12) and childcare centers.

Responsiveness Summary: A section of the **ROD** that includes a listing of the written and oral formal comments received during the **public comment period** and virtual public meeting on the Proposed Plan, and Navy's responses to the comments.

Risk Assessment: See **Ecological Risk Assessment (ERA)** and **Human Health Risk Assessment (HHRA)** (see above).

Superfund: Another name for the **Comprehensive Environmental Response, Compensation, and Liability Act** (**CERCLA**) (see above).

Semivolatile Organic Compound (SVOC): A group of organic (carbon-containing) compounds that evaporate less readily at normal temperatures than **VOCs**.

Superfund Amendments and Reauthorization Act (SARA): A 1986 amendment to **CERCLA** reauthorizing the continued cleanup activities around the country.

Superfund: Another name for the **Comprehensive Environmental Response, Compensation, and Liability Act** (**CERCLA**) (see above).

Total Petroleum Hydrocarbon (TPH): Term used to describe a large family of several hundred chemical compounds that originally come from crude oil.

Unlimited Use and Unrestricted Exposure (UU/UE): There are no restrictions placed on the potential use of land or other natural resources.

Vadose Zone: The vadose zone extends from the top of the ground surface to the water table.

Volatile Organic Compound (VOC): A group of organic (carbon-containing) compounds that evaporate readily at normal temperatures. Typical **VOCs** include the light fraction of gasoline (benzene, toluene, xylenes) and low molecular weight solvents such as trichloroethylene (TCE) and vinyl chloride.

Use This Space to Write Your Comments or To Be Added to the Mailing List

Your input on the Proposed Plan for Naval Weapons Station Earle is important to the Navy, EPA, and NJDEP. Comments provided by the public are valuable in helping to select the remedy for this site.

Please use the space below to write your comments then fold and mail. Comments must be postmarked no later than **August 20, 2020**, and should be sent to the following address:

Naval Weapons Station Earle
Attn: Public Affairs Office
201 Route 34
Building C-2
Colts Neck, NJ 07722

Comments submitted by:

Mailing List Additions, Deletions, or Changes

I would like to:

- ☐ Join the site mailing list.
- ☐ Note a change of address.
- ☐ Unsubscribe from the mailing list.
- ☐ Obtain additional information.

Name: _____

Address: _____

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***** Please check the appropriate box and fill in the correct address information above. *****

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STAMP
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Naval Weapons Station Earle
Attn: Public Affairs Office
201 Route 34
Building C-2
Colts Neck, NJ 07722